



UNITED STATES PATENT AND TRADEMARK OFFICE

[Signature]

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,040	03/26/2004	Jurgen Urban	17441	9532
23389	7590	06/23/2005	EXAMINER	
SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530				PHILOGENE, HAISSA
ART UNIT		PAPER NUMBER		
		2828		

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/811,040	URBAN ET AL.
	Examiner Haissa Philogene	Art Unit 2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 26 March 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,2,10 and 11 is/are rejected.
 7) Claim(s) 3-9 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 26 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/7/04; 9/16/04</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: In page 1, line 4, delete "diehl.....Rothenbach"; in lines 9-10, delete "as set forth.....main claims". In page 2, lines 19-20, delete "That complex object.....main claims". In page 4, lines 13-19, delete "In regard.....In the drawing:".

Appropriate correction is required.

Claim Objections

Claims 10 and 11 are objected to because of the following informalities: In claim 10, lines 1-2, change "characterised in that" to --wherein--. In claim 11, line 3, change "the" before "radiated energy" to --a--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proud, Jr, Patent No. 3,484,619, in view of Ross et al., Patent No. 5,216,695.

As per claim 1, Proud discloses a microwave generator (see Col.1, lines 25-29) with a radiation antenna (formed by lead 68 and outer conductor 22) which is connected to **segments** (30-40) (see Col.3, lines 31-33), and a high-voltage generator (20 kv, not

shown but connected to terminal 72) comprising an energy supplier (28) for charging up the segments, wherein the high-voltage generator is connected through the radiation antenna to a coaxial succession of segments (30-40) (each connected to antenna outer conductor 22 via a bleeder resistance and held at ground potential (not shown, see again Col.3, lines 31-33 and 36-38)) which are then sequentially connectable in parallel with each other. Proud does not explicitly disclose **capacitors** which are to be recharged and which are sequentially connectable in parallel with each other. Ross discloses in Fig.1 a microwave generator having capacitors (C₂...C_n) capable of being recharged and which are sequentially connectable in parallel with each other (see Col.4, lines 37-48). It would have been obvious to a person having ordinary skill in the art to employ the capacitors as taught by Ross into the Proud type generator. This can be achieved by replacing the Proud's segments with the Ross' capacitors. Thus it would ensure high voltage pulse, microwave signals operating at high repetition frequencies using low-cost components.

As per claim 2, Proud in view of Ross discloses the claimed invention substantially as explained above. Further, Ross discloses the **capacitors** (C₂-...C_n) possessing first and second electrodes (plate-like), each capacitor having a respective said second counterpart electrode connected together with the other electrode through ground while the first electrode is connectable through a switch (Q₂, Q₃...Q_n) to the most closely adjacent further electrodes (as shown in Fig.1).

As per claims 10 and 11, Proud discloses in Fig.1 a method of generating and radiating microwave energy wherein a sequence of segments (30-40) which are

successively switched on via switching means (42-50) is charged up from a capacitive high-voltage generator (28) by way of a radiation antenna (68, 22). In addition, Proud discloses the number of pulses to be radiated being predetermined by the number of segments (see Col.5, lines 18-19) which are to be successively charged up and the radiated energy being predetermined through the capacitance of said segments (see Col.5, lines 9-11 and 64-69). Proud does not explicitly disclose capacitors. Ross discloses in Fig.1 a microwave generator having a sequence capacitors (C₂....C_n) which are successively switched on being charged up (see Col.4, lines 37-48). It would have been obvious to a person having ordinary skill in the art to employ the capacitors as taught by Ross into the Proud type generator. This can be achieved by replacing the Proud's segments with the Ross' capacitors. Thus it would ensure high voltage pulse, microwave signals operating at high repetition frequencies using low-cost components.

Allowable Subject Matter

Claims 3-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to disclose "disposed in the interior of a respective tubular said second electrode is a number of axially mutually spaced said first electrodes." (claim 3) and "the capacitor which is located remotest from the energy infeed has an arc switch in relation to a terminating electrode which is at the potential of the respective counterpart electrode." (claim 9).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. ***

Staines et al., Patent No. 6,822,394 ; Bohl et al., Patent No. 6,679,179 ; Hansen et al., Patent No. 4,547,679 ; Naff et al., Patent No. 5,489,818 ; Pub. No. 2004/0066117 ; Astin, Patent No. 3,845,322.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haissa Philogene whose telephone number is (571) 272-1827. The examiner can normally be reached on 6:30 A.M.-6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MinSun Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hp

Haissa Philogene
Primary Examiner
A.U. 201
